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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,004	09/28/2001	Arnold Jeffery Daks	AUS9-2001-0767-US1	4835
7590 10/06/2005			EXAMINER	
Leslie A. Van Leeuwen International Business Machines Corporation Intellectual Property Law Dept., Internal Zip 4054 11400 Burnet Road Austin, TX 78758			ROMANO, JOHN J	
			ART UNIT	PAPER NUMBER
			2192	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/966,004	Applicant(s) DAKS ET AL.	
	Examiner John J. Romano	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. Applicant's amendment and response received July 1st, 2005, responding to the April 8th, 2005, Office action provided in the rejections of claims 1-30, wherein independent claims 1, 8, 15, 22, 25 and 28 have been amended. Claims 1-30 remain pending in the application and new claim 31 is added, which have been fully considered by the examiner.

Applicant arguing for the claims being patentable over Song (see pages 10-15 of the amendment and response), are not persuasive, as will be addressed under Prior Art's Arguments – Rejections section at item 2 and the claim rejections below. Accordingly, Applicants' amendment necessitated additional clarifications, in light of the rejection of the claims over prior art provided in the previous Office action, to further point out that the prior art also discloses as such claimed limitations as now amended which will be provided and/or addressed under the item 2 below. Thus, the rejection of the claims over prior art in the previous Office action is maintained in light of the necessitated additional clarifications provided hereon and **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Prior Art's Arguments – Rejections

2. Applicant's arguments filed July 1st, 2005, in particular on pages 12-15, have been fully considered but they are not persuasive. For example,

(1) In regard to the argument that the Song does teaches the features of setting in each of said plurality of development lines, a sequence of checkpoints, (page 12, third paragraph of the amendment and response), the examiner respectfully disagrees. The setting in each of said plurality of development lines, a sequence of checkpoints, wherein the checkpoints are the Requirements, Plan, Design, Implementation and Integration of the software product, as illustrated in Figure 3. The checkpoints are illustrated in a sequence, from left to right, in Figure 2 as disclosed in the previous office action.

The developmental lines are the components listed in Figure 3, comprising: System Function, Patient and File Function, General Servers and Tools, Measurement, Imaging and Filming, wherein the checkpoints are tracked by checking the box of their respective attributes or activities, also illustrated in Figure 3, (i.e., ...Hazard Analysis, Hazard Test, ...etc.). Thus, the development lines are displayed; wherein, the reached

checkpoints are tracked by marking the status of the said attributes. Therefore, the examiner maintains the rejection in regard to the instant limitation.

(2) In regard to the argument that the Song does teach the features of simultaneously displaying said plurality of developmental lines, (page 13, second paragraph of the amendment and response), the examiner respectfully disagrees. The simultaneous displaying of said plurality of development lines, is also disclosed in Figure 3, wherein the plurality of developmental lines are displayed as indicated above. The plurality of developmental lines are also viewed simultaneously in Figure 3. Therefore, the examiner maintains the rejection in regard to the independent claims.

(3) In regard to the argument that the Song does teach the features of switching of attributes, (page 14, second paragraph of the amendment and response), the examiner respectfully disagrees. Although Song does not explicitly disclose "...switching of said attributes...", he does strongly imply it by disclosing the changing of said attributes. Following is an excerpt from Song, (Column 3, lines 58-62), with underline for emphasis added. "The set of required documents and procedures will change depending on the software component they are associated with. For example, activity Hazard Analysis may not need to be carried out on a non-safety-critical software component", wherein Hazard Analysis is the activity or attribute.

Moreover, in response to the argument that each of the development lines are individually displayed, the examiner again respectfully disagrees. As addressed above, the plurality of development lines are simultaneously displayed, further enabling

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particular actions or attributes to be easily switched. Thus, the examiner maintains the rejection in regard to the dependent claims.

Claim Rejections

Claims 1-31, are pending claims, and stand finally rejected in light of the additional clarifications provided and/or addressed at item 2 above, Prior Art's Arguments – Rejections, and as disclosed below.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1-5, 8-12, 15-19, 22, 25 and 28** are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Song et al., US 5,949,999 (hereinafter **Song**).

3. In regard to claim **1**, **Song** discloses:

- *"A computer controlled display system for tracking the development of complex software products having a plurality of developmental lines..."* (E.g., see Figure 3 & Column 1, lines 37-41), wherein a display which guides tracking of software development documents or products having a plurality of developmental lines is disclosed.
- *"...means for setting in each of said plurality of developmental lines, a sequence of checkpoints..."* (E.g., see Figure 3 & Column 3, lines 57-58), wherein a user defines procedures (checkpoints) to be performed

during the project execution, wherein the particular system component would correspond to a respective developmental line as illustrated in Figure 3. Furthermore, the checkpoints are illustrated in a sequence from left to right as illustrated in Figure 2.

- "...means for tracking each of said developmental lines to determine the reached checkpoints; and means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints." (E.g., see Figure 3 & Column 4, lines 56-65), wherein the means is for tracking the development of software components in a project, wherein a progress status panel is illustrated, which illustrates via the interface (display) reached attributes of checkpoints with by marking the activities (checkpoints) that are completed.

4. In regard to claim 2, the rejections of base claim 1 are incorporated.

Furthermore, **Song** discloses:

- "...means for modifying said developmental lines and said checkpoints..." (E.g., see Figure 2 & Column 3, lines 58-62), wherein the set of required documents and procedures (checkpoints) will change (modify) depending on the software component they are associated with.
- "...and means for displaying said modifications." (E.g., see Figure 3 & Column 4, lines 58-63), wherein a marked activity shows that the

document is available and hidden activities are those omitted. Others are yet to be developed.

5. In regard to claim 3, the rejections of base claim 2 are incorporated.

Furthermore, **Song** discloses:

- "...means for displaying at each of said checkpoints, a set of developmental attributes for said checkpoint." (E.g., see Figure 3 & Column 4, lines 50-55), wherein the activities are the attributes of the checkpoint.

6. In regard to claim 4, the rejections of base claim 3 are incorporated.

Furthermore, **Song** discloses:

- "...means for modifying said developmental attributes for each of said checkpoints; and means for displaying said modifications at each of said checkpoints." (E.g., see Figure 3 & Column 3, lines 57-65), wherein the documents (attributes) are changed (modifying) according to the requirements of the project execution and displayed accordingly as illustrated.

7. In regard to claim 5, the rejections of base claim 3 are incorporated.

Furthermore, **Song** discloses:

- "...said developmental attributes include actions performed in said software product development." (E.g., see Figure 3 & Column 4, lines 21-22), wherein the activities (actions) are selected.

8. In regard to claim 22, **Song** discloses:

- *"A computer controlled display system for tracking the building of a program product from a functional implementation stage to a complete integrated program product..."* (E.g., see Figure 3 & Column 1, lines 37-41), wherein a display which guides tracking of software development documents or products having a plurality of developmental lines is disclosed. Furthermore, Figure 3 illustrates the status of Implementation and Integration phases.
- *"...a plurality of developmental lines respectively corresponding to each of a plurality of program components to be integrated into said complete program product..."* (E.g., see Figure 3 & Column 3, lines 57-58), wherein a user defines procedures (checkpoints) to be performed during the project execution, wherein the particular system component would correspond to a respective developmental line as illustrated in Figure 3, and the system components integrated together would be the software system (complete product).
- *"...means for setting in each of said plurality of developmental lines, a sequence of checkpoints..."* (E.g., see Figure 2 & Column 4, lines 28-35), wherein activities are selected and displayed accordingly.
- *"...means for tracking each of said developmental lines to determine the reached checkpoints; and means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints."* (E.g., see Figure 3 & Column 4, lines 56-65), wherein the

means is for tracking the development of software components in a project, wherein a progress status panel is illustrated, which illustrates via the interface (display) reached checkpoints with by marking the procedures (checkpoints) that are completed.

9. As per claims **8-12** and **25**, this is a method version of the claimed system discussed above, in claims **1-5** and **22**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

10. As per claims **15-19** and **28**, this is a computer program version of the claimed system discussed above, in claims **1-5** and **22**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims **6, 13, 20, 23, 24, 26, 27, 29** and **30**, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Song** in view of obviousness.

13. In regard to claim **6**, the rejections of base claim **5** are incorporated.

Furthermore, **Song** discloses:

- "...means for modifying said actions." (E.g., see Figure 3 & Column 3, lines 57-65), wherein procedures and documents will change (modify) depending on the software component they are associated with. For example, activity (actions) Hazard Analysis may not need to be carried out on a non-safety-critical software component.

But **Song** does not expressly disclose "switch said actions to other of said developmental lines". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to switch the action to other of said developmental lines. The motivation to do so was suggested by **Song** "This variant of the organization's development procedure can be easily represented by the mechanism and changes depending on the selected system component." (E.g., Column 3, lines 63-65) Furthermore, **Song** discloses, "activity Hazard Analysis may not need to be carried out on a non-safety-critical software component" (E.g., Column 3, lines 60-62). Thus, it may be carried out on a safety-critical software component on a different developmental line. Thus, to remove a particular action from one developmental line and implement the same action in another is interpreted as switching. Therefore, it would have been obvious to switch said actions to other of said developmental lines.

14. In regard to claim **23**, the rejections of base claim **22** are incorporated.

Furthermore, **Song** discloses:

- "...further including means for displaying at each of said checkpoints, a set of attributes for said checkpoint." (E.g., see Figure 3 & Column 4, lines 50-55), wherein the activities are the attributes of the checkpoint.

But **Song** does not expressly disclose "*related to the compatibility functions of said checkpoint line*". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include attributes that are related to the compatibility functions of said checkpoint line. The motivation to do so was suggested by (E.g. see, Figure 3 & Column 1, lines 37-45), wherein Song discloses "*the present invention is a mechanism that integrates software engineering and system components to guide the browsing/tracking of software development documents (e.g.,...testing) ...this capability is useful...for developing and validating safety-critical software systems*". It would have been obvious, to one of ordinary skill, at the time the invention was made, to include compatibility functions in the testing. Furthermore, **Song** discloses, "testing" in Figure 3. Therefore, it would have been obvious to include attributes "*related to the compatibility functions of said checkpoint line*".

15. In regard to claim **24**, the rejections of base claim **22** are incorporated.

Furthermore, **Song** discloses:

- "...means for modifying said attributes for each of said checkpoints; and means for displaying said modifications at each of said checkpoints." (E.g., see Figure 3 & Column 3, lines 57-65), wherein the documents (attributes) are changed (modifying) according to the

requirements of the project execution and displayed accordingly as illustrated.

16. As per claims **13**, **26** and **27**, this is a method version of the claimed system discussed above, in claims **6** and **23**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

17. As per claims **20**, **29** and **30**, this is a computer program version of the claimed system discussed above, in claims **6** and **23**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

18. Claims **7**, **14**, **21** and **31** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Song** in view of Hopwood et al., US 6,223,343 B1 (hereinafter **Hopwood**).

19. In regard to claim **7**, the rejections of base claim **2** are incorporated.

Furthermore, **Song** discloses:

- "...means for storing, in association with said means for displaying, the data tracked by said means for tracking; and means for communicating the data tracked to said means for storing." (E.g., see Figure 4 (element 16) & Column 5, lines 38-42), wherein the document repository (store) stores the data tracked in association with displaying,

wherein the data inherently is communicated to the document repository.

But **Song** does not expressly disclose, "*said means for tracking are remote from said means for displaying*". However, **Hopwood** discloses:

- "...*said means for tracking are remote from said means for displaying...*" (E.g., see Figure 6 & Column 15, lines 22-31), wherein the RMS (means for tracking) is remote from the means for displaying.

Song and **Hopwood** are analogous art because they are both concerned with the same field of endeavor, namely, managing/tracking the development of a software product. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Hopwoods'** remote means for tracking with **Songs'** software tracking system. The motivation was disclosed by **Song**, by developing a tracking mechanism "for any organization that produces safety-critical software system". Therefore, it would be obvious, to one of ordinary skill in the art, to access the system remotely as many organizations have developers and managers in remote locations. Thus it would have been obvious to combine **Hopwoods'** remote means for tracking with **Songs'** software tracking system.

20. As per claim **14**, this is a method version of the claimed system discussed above, in claim **7**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

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As per claim **21**, this is a computer program version of the claimed system discussed above, in claim **7**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

21. As per claim **31**, this is a method version of the claimed method discussed above, in claims **8-14**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

Conclusion

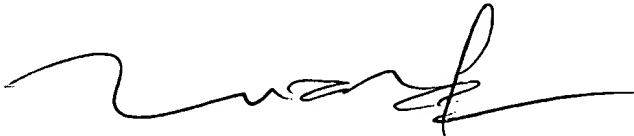
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Romano whose telephone number is (571) 272-3872. The examiner can normally be reached on 8-5:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJR



TUAN DAM
SUPERVISORY PATENT EXAMINER